**Practicing Square Roots & Pythagorean Theorem**

Solve without a Calculator:

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Estimate with a Calculator: Round each answer to the tenths place (one decimal):

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Find the answer to the following (you may use a calculator)

12 = \_\_\_\_\_ 22 = \_\_\_\_\_ 32 = \_\_\_\_\_ 42 = \_\_\_\_\_ 52 = \_\_\_\_\_ 62 = \_\_\_\_\_ 72 = \_\_\_\_\_

82 = \_\_\_\_\_ 92 = \_\_\_\_\_ 102 = \_\_\_\_\_ 112 = \_\_\_\_\_ 132 = \_\_\_\_\_ 142 = \_\_\_\_\_ 152 = \_\_\_\_\_

162 = \_\_\_\_\_ 172 = \_\_\_\_\_ 182 = \_\_\_\_\_ 192 = \_\_\_\_\_ 202 = \_\_\_\_\_ 212 = \_\_\_\_\_ 222 = \_\_\_\_\_

13 = \_\_\_\_\_ 23 = \_\_\_\_\_ 33 = \_\_\_\_\_ 43 = \_\_\_\_\_ 53 = \_\_\_\_\_ 63 = \_\_\_\_\_ 73 = \_\_\_\_\_

83 = \_\_\_\_\_ 93 = \_\_\_\_\_ 103 = \_\_\_\_\_ 14 = \_\_\_\_\_ 24 = \_\_\_\_\_ 34 = \_\_\_\_\_ 44 = \_\_\_\_\_

**Review Question:**

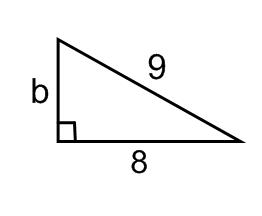
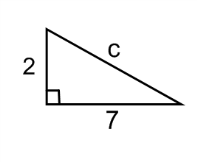
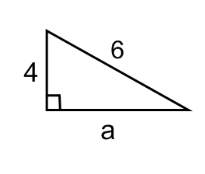
**The Pythagorean Theorem says \_\_\_.**

**When you know *a* and *b*, use this rule to find the 3rd side: .**

**When you know *a* and *c*, use this rule to find the 3rd side: .**

**When you know *b* and *c*, use this rule to find the 3rd side: .**

Find the missing length in the following right triangles, using the Pythagorean Theorem.



a = \_\_\_\_\_\_\_\_ c = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_

If a = 3, b = 4, then c = \_\_\_\_\_\_\_\_.

If a = 5, b = 12, then c = \_\_\_\_\_\_\_\_.

If a = 4, b = 4, then c = \_\_\_\_\_\_\_\_.

If b = 4, c = 6, then a \_\_\_\_\_\_\_\_.

If b = 3, c = 4, then a = \_\_\_\_\_\_\_\_.

If a = 1, c = 5, then b = \_\_\_\_\_\_\_\_.

If a = 8, c = 12, then b = \_\_\_\_\_\_\_\_.

Determine if the following form a right triangle. You must show all work:

True/False The following sides form a right triangle 3cm, 4cm, 5cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle 3cm, 4cm, 6cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle 6cm, 8cm, 10cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle 13cm, 12cm, 5cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle .3cm, .4cm, .5cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle 7cm, 21cm, 20cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle 1.5cm, 2cm, 2.5cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle 30cm, 40cm, 55cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

True/False The following sides form a right triangle 12cm, 13cm, 14cm.

Work:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Finding Cube Roots. Use your calculator (or brain!) to find the following:

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